

What is claimed is:

1. An ultrasonic sealing apparatus, in which a laminated packaging material containing at least a thermoplastic resin layer is formed into a tubular form and the tubular laminated packaging material is transversely ultrasonic sealed, comprising a horn having an elongated and flat sealing face and an opposing jaw having an elongated action face pressing the laminated packaging material in cooperation with the sealing face of the horn, characterized in that a center portion in longitudinal direction of an action face of the opposing jaw is formed into an action face narrower than both end portions.

SUB B' > 2. An ultrasonic sealing apparatus according to claim 1, characterized in that the laminated packaging material contains a paper layer;.

a 3. An ultrasonic sealing apparatus according to claim 1 or 2, characterized in that the transverse ultrasonic sealing is an ultrasonic sealing with a fluid.

a 4. An ultrasonic sealing apparatus according to <sup>claim 1</sup> ~~any of~~ ~~claims 1 to 3~~, characterized in that a length of a center portion, in longitudinal direction of the action face of the opposing jaw, formed into the action face narrower than both end portions is at least larger than a length of a longitudinally sealed three-ply portion of the tubular laminated packaging material under a pressed state.

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5. An ultrasonic sealing apparatus according to <sup>claim 1</sup> ~~any of~~  
~~claims 1 to 4~~, characterized in that a width of the narrow action  
face of the center portion in longitudinal direction is 1/4  
to 1/2 of a width of an action face in the both end portions.

a  
6. An ultrasonic sealing apparatus according to <sup>claim 1</sup> ~~any of~~  
~~claims 1 to 5~~, characterized in that the narrow action face  
of the center portion in longitudinal direction has a recess  
formed along a direction perpendicular to the longitudinal  
direction of the action face.

7. An ultrasonic sealing apparatus according to claim  
6, characterized in that the formed recess is a recess having  
an arc shape in section.

a  
8. An ultrasonic sealing apparatus according to <sup>claim 1</sup> ~~any of~~  
~~claims 1 to 7~~, characterized in that, when the laminated  
packaging material is formed into a tubular form, the tubular  
laminated packaging material is the tubular laminated  
packaging material formed into the tubular form by using a  
sealing tape.

9. An ultrasonic sealing apparatus, in which a laminated  
packaging material containing at least a thermoplastic resin  
layer is formed into a tubular form and the tubular laminated  
packaging material is transversely ultrasonic sealed,  
comprising a horn having an elongated and flat sealing face  
and an opposing jaw having an elongated action face pressing  
the laminated packaging material in cooperation with the

sealing face of the horn, characterized in that, at a center portion in longitudinal direction of an action face of the opposing jaw, a recess is formed along a direction perpendicular to the longitudinal direction of the action face.

Sub B47 10. An ultrasonic sealing apparatus according to claim 9, characterized in that the laminated packaging material contains a paper layer.

a 11. An ultrasonic sealing apparatus according to claim 9 or 10, characterized in that the transverse ultrasonic sealing is an ultrasonic sealing with a fluid.

a 12. An ultrasonic sealing apparatus according to <sup>claim 9</sup> ~~any of~~ ~~claims 9 to 11~~, characterized in that a length of a center portion in longitudinal direction of the action face of the opposing jaw is at least larger than a length of a longitudinally sealed three-ply portion of the tubular laminated packaging material under a pressed state.

a 13. An ultrasonic sealing apparatus according to <sup>claim 9</sup> ~~any of~~ ~~claims 9 to 12~~, characterized in that the formed recess is a recess having an arc shape in section.

a 14. An ultrasonic sealing apparatus according to <sup>claim 9</sup> ~~any of~~ ~~claims 9 to 13~~, characterized in that, when the laminated packaging material is formed into the tubular form, the tubular laminated packaging material is a tubular laminated packaging material formed into the tubular form by using a sealing tape.